

REMARKS

***Claim Rejections - 35 USC §102***

Claims 11-14 are rejected under 35 U.S.C. §102(e) as being anticipated by Passemard (US 2001/0004550 A1, hereinafter “Passemard”).

With regard to claim 11, the independent claims have been clarified to amend the previously claimed combination to now include the limitation not disclosed in Passemard of:

“a dielectric layer further comprising a non-barrier dielectric material capable of being changed into a barrier dielectric material and having a opening provided therein, the dielectric layer around the opening of the barrier dielectric material which separates the non-barrier dielectric material from the opening;” [underlining for clarity]

The support for this amendment is in FIG. 3, which shows the first channel dielectric layer 208, which includes the barrier polymeric silicon carbide material 225 around the first channel 202 and separating the non-barrier material of the first channel dielectric layer 208 from the first channel 202. The paragraph beginning on Specification page 7, line 9, has been amended to better disclose this without introducing new matter based on in *In re Wofensperger*, 302 F.2d 950, 133 USPQ 537 (CCPA 1962), which held that drawings alone may provide the basis for subsequent amendments to the specification without producing prohibitory new matter:

“Around the first channel 202 is the first channel dielectric layer 208, which includes a region of barrier polymeric silicon carbide (SiC(H)) material 225, which is known to have good diffusion barrier properties, in the non-barrier SiCOH material and separating the SiCOH material from the first channel 202. The first channel 202 is made up of a first seed layer 228 around a first conductor core 230. The second channel 204 and the via 206 are surrounded by a second region of barrier SiC(H) material 231 in the non-barrier SiCOH material. The second channel 204 includes a second seed layer 234 around a second conductor core 236.”

In Passemard, the two materials are layered on each other and are both in contact with the opening as shown in Passemard FIG. 10.

With regard to claims 12-14, these dependent claims respectively depend from independent claim 11 and are believed to be allowable since they contain all the limitations

Serial No.: 09/  
Group Art Unit:

set forth in the independent claim from which they depend and claim additional unobvious combinations thereof.

Based on the above, it is respectfully submitted that claim 11-14 are allowable under 35 U.S.C. §102(e) as not being anticipated by Passemard.

#### *Claim Rejections - 35 USC §103*

Claims 15-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Passemard (US 2001/0004550 A1, hereinafter “Passemard”) in view of Ito (US 6,372,114, hereinafter “Ito”).

With regard to claim 15, the independent claims have been clarified to amend the previously claimed combination to now include the limitation not disclosed in Passemard of:

“a dielectric layer further comprising a non-barrier dielectric material capable of being changed into a barrier dielectric material and having a opening provided therein, the dielectric layer around the opening of the barrier dielectric material which separates the non-barrier dielectric material from the opening;” [underlining for clarity]

The support for this amendment is in FIG. 3 and the paragraph beginning on Specification page 7, line 9, as explained above.

Neither Passmard nor Ito teach or suggest the claimed limitation.

With regard to claims 12-14, these dependent claims respectively depend from independent claim 11 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and claim additional unobvious combinations thereof.

Based on the above, it is respectfully submitted that claim 15-18 are allowable under 35 U.S.C. §103(a) as not being obvious based on Passemard in view of Ito.

#### *New Claims*

New claims 19-22 have been added. The support for the claims is in the paragraph starting on page 7, line 18.

Serial No.: 09/  
Group Art Unit:

***Conclusion***

In view of the above, it is submitted that the claims are in condition for allowance.  
Allowance of claims 11-22 at an early date is solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including any extension of time fees, to Deposit Account No. 01-0365 and please credit any excess fees to such deposit account.

Respectfully submitted,



Mikio Ishimaru  
Registration No. 27,449

The Law Offices of Mikio Ishimaru  
1110 Sunnyvale-Saratoga Rd., Suite A1  
Sunnyvale, CA 94087  
Telephone: (408) 738-0592  
Fax: (408) 738-0881  
Date: April 11, 2005